



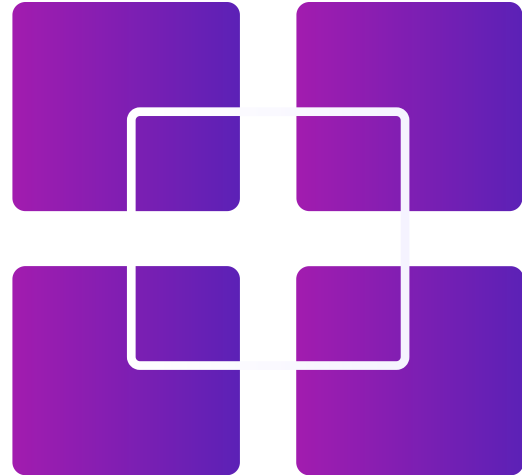
Lecture 12

- Computer simulations
- Diversity



Agenda

- Method: Computer simulations
 - Strengths: when?
 - Weakness
 - Example: Hur (In progress)
- Topic: Diversity
 - Stereotype Content Model (Fiske)
 - Social Role Theory (Eagly)
 - Impression management
- Discussion
 - Chang et al. (2019)
 - Discussion questions
- Wrap up



Method: Computer simulations

- Strengths: when?
- Weakness
- Example: Hur (In progress)

Strengths: Monte Carlo simulations

- Predict a set of outcomes based on an estimated range of values versus a set of fixed input values
- Three steps of simulations
 - Set up a predictive model with DV (output)/ IV (input)
 - Specify probability distributions of the inputs – based on data available and relevant (e.g., historical data, subjective judgment)
 - Run simulations repeatedly (e.g., $N = 10,000$), until enough results are gathered

Strengths: Monte Carlo simulations

- Let me show you...
- Hur (in progress) conducted a simulation in which The Voice contestants make 10,000 choices of their coaches in a simulated environment that replicated the present data
- Replicated each contestant's choice set – how many potential advisors they had as choice options, for each simulation
- Replicated each coach's interest – how many potential contestants they turned their chair towards, for each simulation

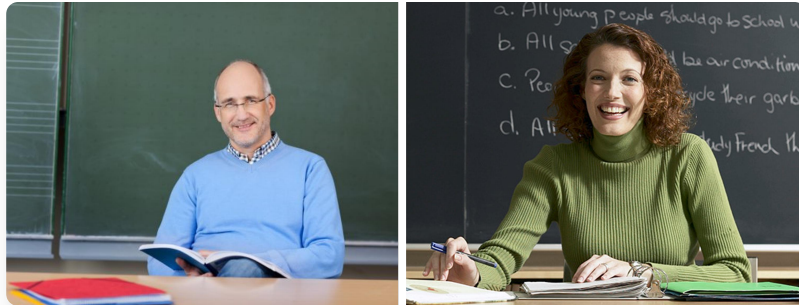
Losing Competition for Talent: Gender Bias in Advisor Selection

BY Julia D. Hur



Research Question

Q. How do people choose their mentors?



Mentor-protégé relationship

Mentor definition

- Individual with advanced experience and expertise who contribute to protégés' development by providing advice, support, and resources
- Allen, 2004; Hunt & Michael, 1983; Kram & Isabella, 1985

Mutual selection process

- Proteges seek advice and mentorship + Mentors need to accept

Important relationship for both parties

- Proteges receiving higher compensation, promotions, network opportunities
- Mentors receiving more recognition, career success, stronger presence
 - Eby, Durley, Evans, & Ragins, 2006; Liu, Liu, Kwan, & Mao, 2009

Central Prediction

Female mentors face more obstacles in recruiting proteges.

- Gender bias in earlier stage of mentor-protégé relationships
 - Dreher & Cox, 1996; Ragins & Cotton, 1999



Theoretical Development

Female mentors are less successful in protégé recruitment

- Role congruity theory of female leaders
 - Eagly & Karau, 2002; Heilman, 2012; King et al., 2012
- Competence and expertise are required for mentors
 - Feng & MacGeorge, 2006; Jungmann & Fischer, 2005
- Discrepancy with stereotypically female (vs. male) traits

Theoretical Development

Gender bias is stronger when female mentors are tokens

- Group membership becomes more visible when underrepresented
 - Archbold & Schulz, 2008; King, Hebl, George, & Matusik, 2010
- Token status is especially detrimental in male-dominated roles
 - Keller & Sekaquaptewa, 2008; Yoder, 1991; Zimmer, 1988
- Categorize as "the" female mentor and associate with stereotypically female traits

Hypotheses

Hypothesis 1. Female mentors will be less successful in protégé recruitment than their male counterparts.

Hypothesis 2. Gender composition will moderate the effect of mentor's gender on protégé recruitment.

Hypothesis 3. Protégé gender will moderate the effect of mentor's gender on protégé recruitment.

Method



Method

Design: Blind auditions with 4 potential mentors

- Artists perform and coaches turn or not



Method

Design: Blind auditions with 4 potential mentors

- Artists perform and coaches turn or not
- Artists choose their mentor throughout the season



Method

Design: Blind auditions with 4 potential mentors

- Artists perform and coaches turn or not
- Artists choose their mentor throughout the season
- Artists' real-time, high-stakes decisions on choosing mentors
 - "Dedicate themselves to developing their team of artists, giving them advice and sharing the secrets of their success"
(Bear & Hwang, 2015; McManus & Russell, 1997; Noe et al., 2002)
 - "Opportunity for a lifetime," "incredibly important"

Method

Sample

Sample total 27 seasons (18 U.S. & 9 Australia) and 1861 contestants 948 contestants (496 females; $M = 25.27$) who had a choice Fixed set of coaches (15 token & 12 non-token)



Method

Outcome: Protégé recruitment

- How successful female (vs. male) mentors are in recruitment?
 - Number of proteges was fixed per coach
 - Composition of proteges: perceived talent of proteges (Beechler & Woodward, 2009; Tervio, 2009; Tucker, Kao, & Verma, 2005)
- Perceived talent as the demand of a candidate on the labor market
 - Low – high perceived talent of proteges (2 – 4 coaches attracted)
 - E.g., Green & Bauer, 1995
- How many high (vs. low) perceived talent proteges have in their team?

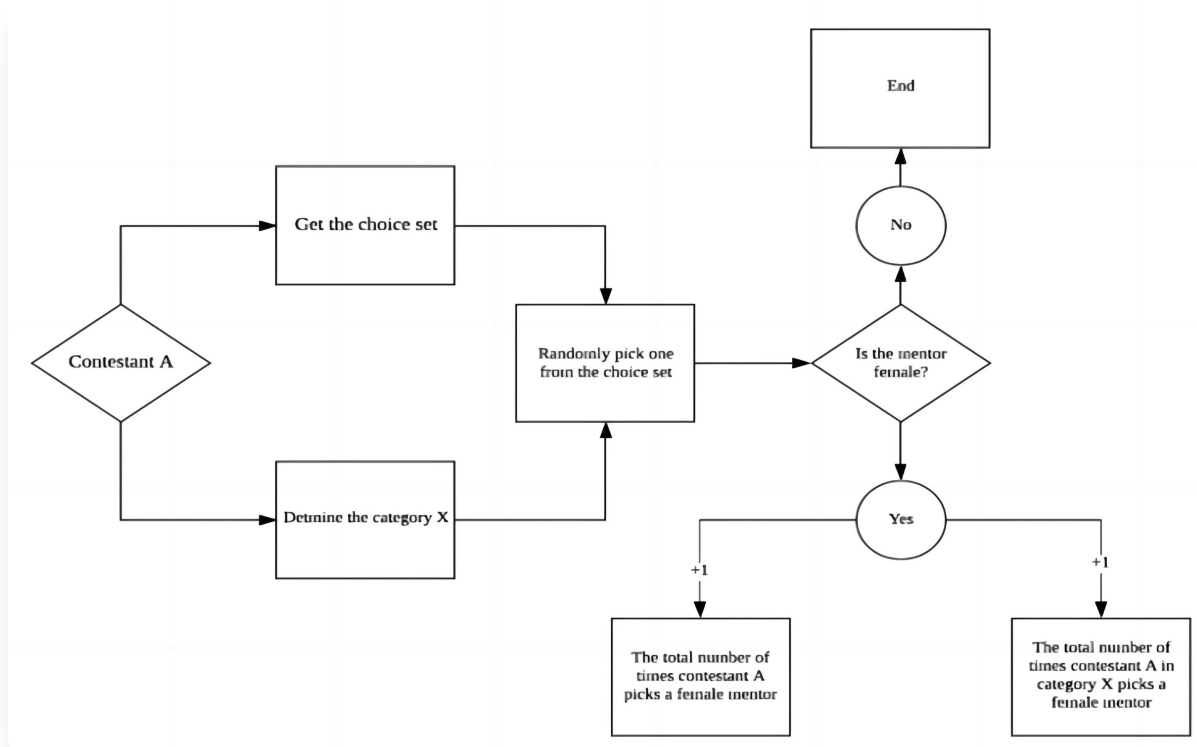
Method

Analysis strategy

- Monte Carlo Simulation (Fishman, 2013; Rubinstein & Kroese, 2011)
- Protégés make several thousand choices of their mentors in a simulated environment that replicated the present data
 - Chang et al., 2019; Dezsó et al., 2016; Hastie & Kameda, 2005
- 10,000 simulated distributions of mentors to contestant
 - E.g., Josh Logan had Adam, Blake, and Christina
 - E.g., Adam Levine was interested in 10 contestants in Season 2
- Averaged the values of how many female mentors were selected by the lower-, medium-, and higher-potential contestants

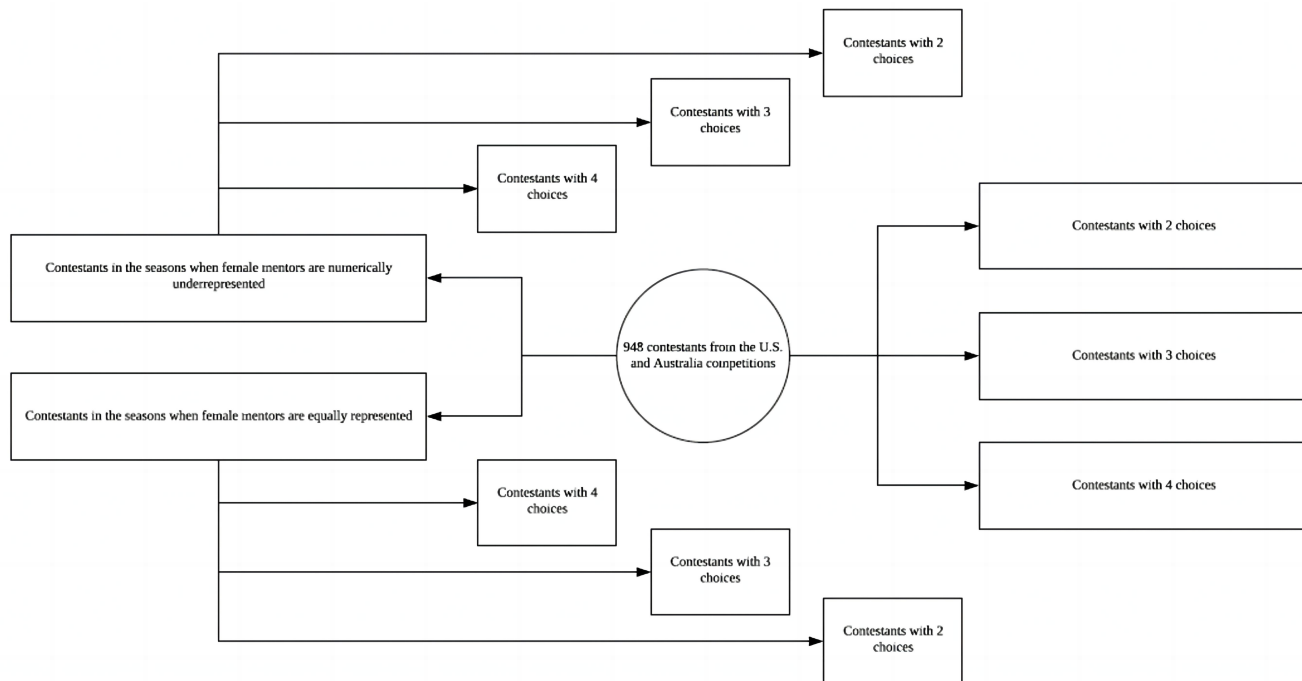
Method

Analysis strategy



Method

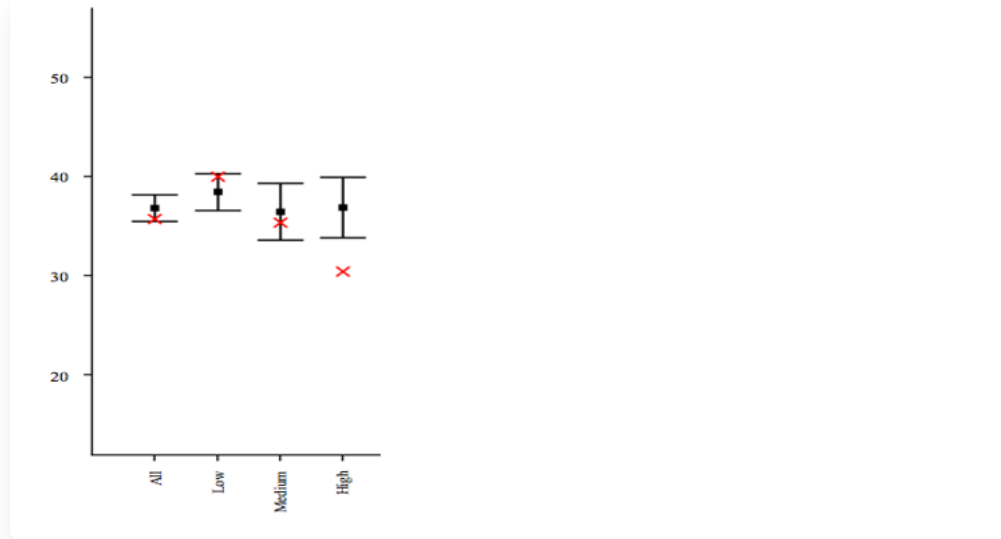
Analysis strategy



Result

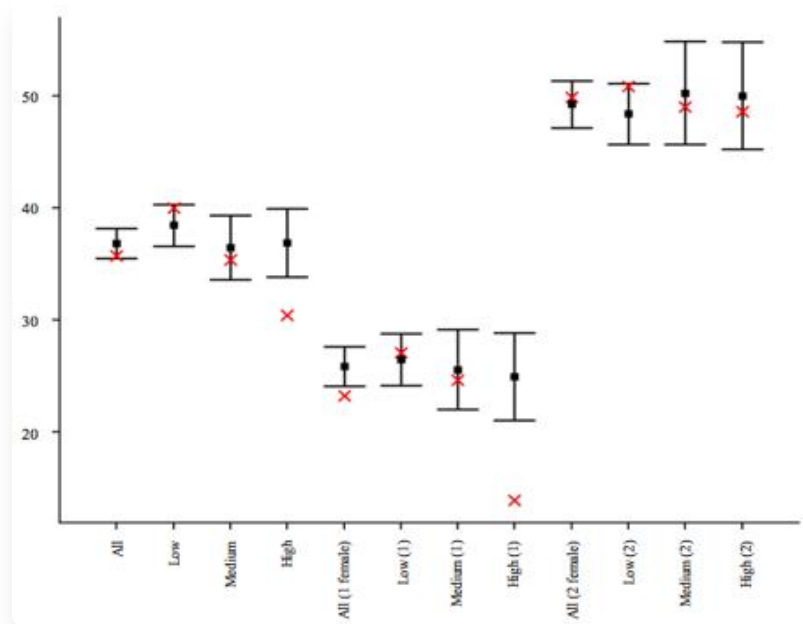
Result

H1. Female mentors will be less successful in protégé recruitment than their male counterparts.



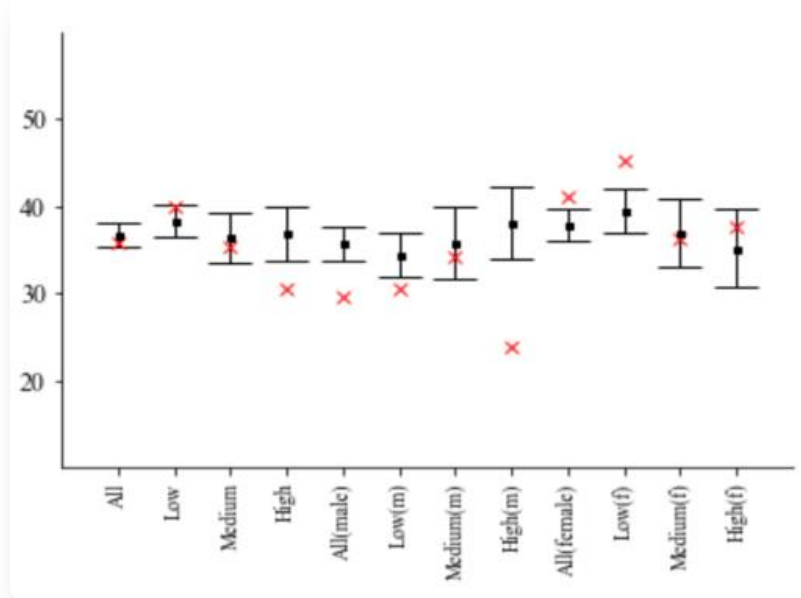
Result

H2. Gender composition will moderate the effect of mentor's gender on protégé recruitment.



Result

H3. Protégé gender will moderate the effect of mentor's gender on protégé recruitment.



Robustness Checks

OLS regression for tokenism

- Numerical representation (1 = equally represented; 0 = underrepresented)
- Expected – observed number of proteges recruited
- High ($b = -.11, p = .007$) vs. mid ($b = -.01, p = .853$) or low potential proteges ($b = -.03, p = .548$)

Placebo simulation

- Ensure the difference is due to gender bias
- Simulation for mentors whose birth year ended with either an odd or even number (binary variable)

Theoretical Implications

Broaden the investigation of gender bias in organizations

- Dreher & Cox, 1996; O'Neill & Blake-Beard, 2002; Ragins & Cotton, 1999

The literature on advice seeking and mentor selection

- Blunden et al., 2019; Brooks et al., 2015, Hur et al., 2020

Tokenism in mentor-protégé relationships

- Elstad & Ladegard, 2012; Gupta, 2007; Konrad, Kramer, & Erkut, 2008

Summary



“We call it the girl curse, like no female coach has ever taken home an actual winner.”

Strengths: Computer simulations

- When a control condition is impossible
 - Detect whether a bias exists in a real world
 - Ex. Chang et al. 2019
- When any experiment/ intervention is impossible
 - Simulate what would happen with a bias/ strategy
 - Ex. What strategy is most effective in Prisoner's dilemma
 - Ex. What happens when there is one biased recruiter
- When otherwise a large sampling is impossible
 - Ex. 10,000 decisions; 10,000 strategies
 - Results are often highly replicable

Weakness: Computer simulations

- Disclaimer: this is still a minor, rare method in Organizational Behavior
- Scholars are still skeptical about non "real" behavior
 - Especially in Psychology, Sociology, and related fields
- Only limited questions can be tested with simulations

Topic: Diversity

- Stereotype Content Model (Fiske)
- Social Role Theory (Eagly)
- Impression management (symbolic compliance)

Stereotype Content Model

- Warmth and Competence
- Stereotypically, women are high on warmth; men are high on competence
- If there is incongruence, a member of the group (especially minority) is disadvantaged

Social Role Theory

- Congruence with one's group membership and role
- In organizations, a "leader" role is more associated with men
- If there is incongruence, a member of the group is disadvantaged

Impression management/ Symbolic Compliance Theory

- Organizations engage in "symbolic" compliance to manage their impression and legitimacy to the stakeholders
- Organizations engage in impression management on all different, socially normative behaviors (e.g., sustainability; zero emission), including diversity
- Q. Can you think about other examples? This happens a lot...

Computer simulations in Diversity: Chang et al. (2019)

Wrap up: Three goals of the class

- Write your thesis
- **Learn about OB topics and methods**
- Look into data critically!

Wrap up: Three goals of the class

Topics

- Motivation
- Incentives
- Employee relationships
- Status
- Human resource
- Leadership
- Feedback
- Diversity
- Network
- Decision-making

Wrap up: Three goals of the class

Methods

- Laboratory experiments
- Field experiments
- Archival data (government data, sports, entertainment)
- Interviews
- Computer simulations
- Network analyses
- Behavioral interventions
- Content analysis
- Mixed Methods
- Ethics
- Replicability

Wrap up: Three goals of the class

- Write your thesis
- Learn about OB topics and methods
- **Look into data critically!**

Wrap up: Look into data critically!

- We live in the time of overflow of data
- Some of the data... is not very good
- e.g., vaccine & autism? 5G & COVID?
- It is important to look into it critically

Wrap up

Research (thesis) paper

- Formatting can follow the thesis guideline
- Submit to me (as a thesis advisor) by the deadline

Research podcast

- Replacing usual research presentations
- Can be helpful for your portfolio
- Important to communicate your idea in an effective way
- Criteria: 1) Communication, 2) Creativity, 3) Overall quality
- learn
- how-to-start-a-podcast-hour
- how-to-write-podcast-scripts